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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

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COMMENTS OF MRC TELECOMMUNICATIONS, INC.

1. MRC is a small regional common carrier providing video, voice and data communications services to the public and to other carriers principally in the States of Illinois, Wisconsin and Minnesota. The facilities used to provide this service consist of a variety of terrestrial, satellite and fiber facilities, including approximately 80 frequency paths in the 6 and 11 GHz frequency bands. In many instances, MRC provides its customers with the only source of communications service to meet the customer's needs. Continued use of the 6 and 11 GHz bands is critical to MRC's continued ability to provide these essential common carrier services.

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2. The Commission has proposed to reallocate spectrum in the 6 and 11 GHz and other bands to licensees that are being displaced in the 2 GHz band in order to make available 220 MHz of 2 GHz spectrum for emerging technologies. It is most unfortunate that the Commission has chosen to proceed with this displacement. But having decided to proceed in this manner, the Commission must not, indeed cannot under its statutory mandate, squeeze these displaced users into other heavily used parts of the spectrum on a co-primary basis with existing users. Nor can it do so in a manner that will impair significantly the ability of common carriers to continue to provide essential communications services to the public.

3. MRC presently operates in many areas where there is severe frequency congestion in the 6 and 11 GHz bands, and no acceptable alternative frequencies are available. In other instances, MRC's services are critically necessary to meet the communications needs of users in remote areas. The Commission's proposals in the FNPRM would threaten MRC's ability to meet customer needs for service in both densely populated and remote areas. MRC therefore implores the Commission not to make frequencies available to the displaced 2 GHz users on a co-primary basis using the separation and channelization being proposed in the FNPRM for the 6 and 11 GHz bands.

4. While MRC does not have the resources to provide a detailed analysis and study of the Commission's proposals, it has chosen to at least highlight some of the more significant problems presented by the Commission's proposals.

A. THE PROPOSED 30 MHz SEPARATION IS
CONTRARY TO THE PUBLIC INTEREST

5. The majority of the 6 GHz common carrier frequency band is channelized into 29.65 MHz segments. The channelization follows the standard "T-plan" proposed by Bell Laboratories and adopted by the industry many years ago. One of the primary reasons for the 29.65 MHz staggering of frequencies was to reduce intermodulation interference between channels when carriers utilize multiple channels in the 6 GHz frequency band. Intermodulation primarily affects wideband analog transmission systems and occurs when a combination of transmitters in the same antenna system interfere with receivers using the same antenna system.

6. MRC and many other similarly situated common carriers currently have in service extensive analog transmission facilities and future plans call for their expansion. The 30 MHz channel separation proposed in the FNPRM seems to consider only digital transmission systems which are less affected by this type of interference. Although the 30 MHz spectrum allocation may be mathematically convenient for its division into smaller increments, it does not address all

potential interference sources. Also, even if users operating in the present "T-plan" are grandfathered, new users employing a 30 MHz staggered plan will significantly change the interference environment, creating incompatibility between new and existing 6 GHz operators and an inefficient utilization of the frequency spectrum.

B. THE PROPOSED CHANNELIZATION PLAN
WOULD BE A DISASTER

7. The proposed channelization plan for the 4, 6 and 11 GHz bands would permit multiple channel bandwidths within the same frequency spectrum. Significant interference would exist between users utilizing the different bandwidths, such that a user utilizing only a small portion of the spectrum (400 KHz or 10 MHz) would have the potential of causing unacceptable interference to those carriers needing larger capacities of the spectrum. Thus, a user providing for only its own internal communications needs, or for a few customers, could effectively block a common carrier's ability to serve a wide segment of the public. Therefore, the spectrum efficiency would be vastly decreased and services to the public would be severely impacted.

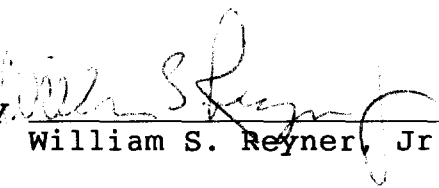
8. Part 21 of the Rules currently requires 40 MHz spacing for channels in the 11 GHz band. Most existing digital and analog common carrier radio systems in this band are designed for this bandwidth. The re-channelization of the 11

GHz frequency spectrum to 30 MHz and smaller increments would be incompatible with most existing equipment. All existing equipment would have to be removed from service and be replaced or reconditioned to be compatible with the new requirements. This would cause severe disruptions in service to the public and require small carriers such as MRC to incur significant expense, most likely resulting in the cessation of service and business failures.

9. As is evidenced by the foregoing, it is apparent that the Commission is having a most difficult time finding spectrum for the displaced 2 GHz users and has not fully considered the adverse impacts on both existing common carrier service and the public users of that service that most assuredly will flow from its proposals. At the very least, before proceeding further, the Commission should consider the problems touched upon herein by examining existing frequency usage in the relevant bands in specific parts of the country. For example, in the greater Chicago, Illinois area would it be possible to accommodate in the 4, 6 and 11 GHz bands those 2 GHz users which will be displaced? What would be the impact and costs of doing so if the technical standards under consideration are applied?

WHEREFORE, for the foregoing reasons, MRC urges the Commission to reassess its proposal to avoid the forced reallocation and adoption of technical standards that clearly will impair the ability of numerous carriers similarly situated to MRC to continue to provide their important communications services to the public.

Respectfully Submitted,
MRC TELECOMMUNICATIONS, INC.

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